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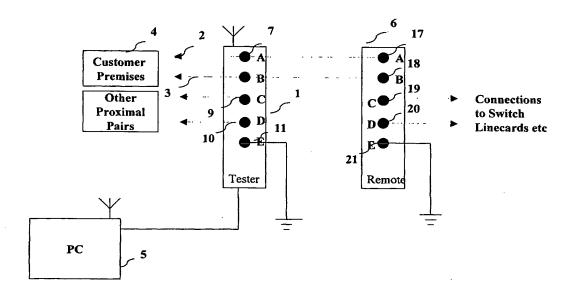
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(54) Title: LINE TESTING APPARATUS AND METHOD



(57) Abstract: The line test apparatus includes a PC (5) which stores known line test signature parameters for a number of known fault conditions in which by application of varying signals to a line pair (2,3) under test and capturing parameters during a period in which varying signals are applied to the line via a test head (1), an estimate of the state of the line can be made. A remote unit (6) located at a switch or exchange may also be used to complete the automated scanning of parameters of a line in response to various electrical stimuli. The invention is particularly effective at determining faults which are "dynamic" as well as those which are permanent until repaired.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 H04M3/24 H04M3/30 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) IPC 7 HO4M Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X US 5 699 402 A (BAUER FRANK R ET AL) 1-7 16 December 1997 (1997-12-16) cited in the application column 3, line 31 - line 38 column 3, line 57 - line 65 8-12 column 4, line 61 - column 5, line 3 column 6, line 45 - column 7, line 5 column 13, line 6 - line 10 column 28, line 15 - line 22 column 28, line 35 - line 39 column 28, line 60 - column 29, line 3 X Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-ments, such combination being obvious to a person skilled "O" document referring to an oral disclosure, use, exhibition or other means document published prior to the international filing date but later than the priority date claimed *&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 11 October 2004 19/10/2004 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Fel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Schweitz, M

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